

**WHAT IS CLAIMED IS:**

1. A battery comprising an anode, including an anode substrate and a layer of an anode active material, formed on said anode substrate, a cathode, including a cathode substrate and a layer of a cathode active material, formed on said cathode substrate, and an electrolyte, containing an electrolyte salt, wherein

said anode substrate and/or said cathode substrate include a resin layer containing a polymer and a metal layer containing electrically conductive metal.

2. The battery according to claim 1, wherein said resin layer includes one or more of an olefinic resin, a sulfur-containing resin, a nitrogen-containing resin and a fluorine-containing resin, as said polymer, and wherein said metal layer includes one or more of copper, nickel, titanium, stainless steel, iron and aluminum, as said electrically conductive metal.

3. The battery according to claim 1, wherein said resin layer includes one or more through-hole(s) extending from one major surface to the opposite major surface thereof.

4. The battery according to claim 1, wherein said metal layer is formed on each of said major surfaces of the resin layer by a thin film forming technique so that said metal layers are electrically contacted with each other.

5. The battery according to claim 1, wherein said polymer has a true specific gravity not less than 0.9 g/cc and not larger than 1.8 g/cc.

6. The battery according to claim 1, wherein said polymer has a thermal

conductivity not less than  $3 \times 10^{-4}$  cal/cm<sup>2</sup>·sec·(K·cm<sup>-1</sup>)<sup>-1</sup>.

7. The battery according to claim 1, wherein said anode contains a carbonaceous material as said anode active material and wherein said cathode contains one or more of transition metal oxides represented by the general formula  $M_xO_y$ , where M is one or more of transition metals, with  $x \geq 1$  and  $y \geq 1$ , and lithium complex oxides represented by the general formula  $Li_xM_yO_z$ , where M is one or more of Co, Ni, Mn, Fe, Al, V and Ti, with  $x \geq 1$ ,  $y \geq 1$  and  $z \geq 2$ .

8. The battery according to claim 1, comprising said anode which is band-shaped, and said cathode which is also band-shaped, said anode and the cathode being coiled longitudinally with a separator in-between.